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Application No.: 10/500,393
Amendment Dated: September 4, 2007
Reply to Office Action of: July 3, 2007

MAT-8559US

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A piezoelectric vibrator comprising:

a piezoelectric plate, having a polarization that points in a direction of a thickness of the piezoelectric plate, the piezoelectric plate having a first face and a second face;

a first electrode for covering the first face;

a second electrode for covering the second face;

a first dielectric film for covering the first electrode; and

a second dielectric film for covering the second electrode,

wherein the piezoelectric plate employs a thickness longitudinal vibration as a principal vibration,

the first dielectric film and the second dielectric film have substantially a same thickness and a substantially same area,

a ratio of a sum of a thickness (ts) of the first dielectric film and the second dielectric film to the thickness (tp) of the piezoelectric plate is provided in a range such that an electro-mechanical coupling factor is substantially constant,

wherein the range of the ratio (ts/tp) of the sum of the thickness of the first dielectric film and the second dielectric film to the thickness of the piezoelectric plate is between 0.7 and 2.0, inclusive, and

the first dielectric film and the second dielectric film are disposed formed to be substantially point symmetric with each other ~~with respect to a diagonal line extending~~